State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY HERBERT
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Department of
Environmental Quality

William J. Sinclair
Acting Executive Director

DIVISION OF AIR QUALITY
Cheryl Heying
Director

DAQE-IN0108200005-09

January 22, 2009

Mike Edwards
Geneva Rock Products
1565 West 400 North
P.O. Box 538
Orem, UT 84057

Dear Mr. Edwards:

Re: Intent to Approve: Modification to Approval Order DAQE-AN0820003-05 to Increase Production, Add a Paint Spraying Operation and an Abrasive Blasting Operation, and Update Equipment List, Utah County - CDS SM; MACT (Part 63), NSPS (Part 60), Nonattainment and Maintenance Area, PM_{10} SIP / Maint Plan
Project Number: NSR010820-0005

The attached document is the Intent to Approve for the above-referenced project. The Intent to Approve is subject to public review. Any comments received shall be considered before an Approval Order is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an Approval Order. An invoice will follow upon issuance of the final Approval Order.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Mr. Alan Humpherys, who may be reached at (801) 536-4142.

Sincerely,

John T Blanchard, Manager
Minor New Source Review Section

JTB:AH:kw

cc: Utah County Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

INTENT TO APPROVE: Modification to Approval Order DAQE-AN0820003-05 to Increase Production, Add a Paint Spraying Operation and an Abrasive Blasting Operation, and Update Equipment List

Prepared By: Mr. Alan Humpherys, Engineer
Phone: (801) 536-4142
Email: ahumpherys@utah.gov

INTENT TO APPROVE NUMBER

DAQE-IN0108200005-09

Date: January 22, 2009

Orem Hot Mix Asphalt Plant & Concrete Batch Plants

Source Contact:
Mr. Mike Edwards
Phone: (801) 281-7890

John T Blanchard, Manager
Minor New Source Review Section
Utah Division of Air Quality

ABSTRACT

Geneva Rock Products has requested a modification to their AO DAQE-AN0820003-05. Geneva Rock Products operates aggregate processing equipment, two concrete batch plants, and a hot mix asphalt plant at the Orem facility. The proposed modifications are to increase hot mix asphalt production from 350,000 tons to 600,000 tons per rolling 12-month period, add an abrasive blasting operation, add a paint spray booth, and install a baghouse on the truck-mix concrete batch plant. The facility will also process up to 85,000 tons of recycled concrete material.

The potential emissions, in tons per year, will change as follows: PM_{10} + 9.86, NO_x - 0.73, SO_2 + 5.17, CO + 13.32, VOC + 17.44, HAPs + 11.43

The changes in emissions will result in the following, in tons per year, potential to emit totals: PM_{10} = 21.53, NO_x = 20.58, SO_2 = 17.64, CO = 41.01, VOC = 29.74, HAPs = 14.58

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in The Daily Herald on January 27, 2009. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

Name of Permittee:

Geneva Rock Products
1565 West 400 North
P.O. Box 538
Orem, UT 84057

Permitted Location:

Orem Hot Mix Asphalt Plant &
Concrete Batch Plants
1565 West 400 North
Orem, UT 84059

UTM coordinates:438,021 m Easting, 4,461,464 m Northing
SIC code:3273 (Ready-Mixed Concrete)

Section I: GENERAL PROVISIONS

I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]

I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]

I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]

I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401]

I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]

I.6 The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring. [R307-150]

I.7 The owner/operator shall comply with UAC R307-107. General Requirements: Unavoidable Breakdowns. [R307-107]

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

II.A.1 **Hot Mix Asphalt, Concrete, & Aggregate Facility**

II.A.2 **One (1) Hot Mix Asphalt Plant (HMAP)**
Capacity: 400 tons per hour
Control Device: Baghouse

II.A.3 **One (1) Central-Mix Concrete Batch Plant (CCBP)**
Mixer Size: 12 cubic yards
Capacity: 200 cubic yards per hour
Control Device: Baghouse

II.A.4 **One (1) Truck-Mix Concrete Batch Plant (TCBP)**
Mixer Size: 12 cubic yards
Capacity: 100 cubic yards per hour
Control Device: Baghouse

II.A.5 **One (1) 3.4 MMBTU/hr Hot Oil Heater**
Fuel: Natural Gas
Associated with the HMAP

II.A.6 **One (1) 4.0 MMBTU/hr Hot Water Heater**
Fuel: Natural Gas
Associated with the CCBP

II.A.7 **One (1) 2.9 MMBTU/hr Hot Water Heater**
Fuel: Natural Gas
Associated with the TCBP

II.A.8 **One (1) Backup Generator**
Rating: 152 hp
Fuel Type: Diesel Fuel

II.A.9 **One (1) Paint Spray Booth**
Including: HVLP Paint Spray Guns
Control Device: Fabric Filter

II.A.10 **One (1) Abrasive Blasting Enclosure**
Including: Abrasive Blasting Enclosure, Pneumatic Abrasive Blasting Guns, and Associated Equipment

II.A.11 **Two (2) Abrasive Blasting Portable Air Compressors**
Rating: 125 hp each
Fuel Type: Diesel Fuel

II.A.12 **Miscellaneous Equipment**
Includes: Welders, pumps, motors, pressure washers, and parts washers associated with construction materials processing, manufacture, and maintenance

II.A.13 **One (1) Asphalt Cement 1 Storage Tank**
Capacity: 30,000 gallons

II.A.14 **One (1) Asphalt Cement 5 Storage Tank**
Capacity: 250,000 gallons

II.A.15 **One (1) Burner Fuel (Waste Oil) Storage Tank**
Capacity: 10,000 gallons

II.A.16 **One (1) Tack Oil Storage Tank**
Capacity: 10,000 gallons

II.A.17 **One (1) 12,000 gallon Diesel Storage Tank**
Fuel: Ultra-low Sulfur Diesel-Fuel

II.A.18 **One (1) 6,000 gallon Diesel Storage Tank**
Fuel: Ultra-low Sulfur Diesel-Fuel

II.A.19 **One (1) Low Sulfur Diesel Storage Tank**
Capacity: 6,000 gallons

II.A.20 **One (1) Gasoline Storage Tank**
Capacity: 5,000 gallons

II.A.21 **Various Aggregate Feeder Bins**
associated with the Aggregate Processing Plant

II.A.22 **Various Conveyors and Feeders**
associated with the Aggregate Processing Plant

II.A.23 **Various Scalping Screens**
associated with the Aggregate Processing Plant

II.A.24 **One (1) Wet Screen**
Capacity: 500 tons per hour
associated with the Aggregate Processing Plant

II.A.25 **One (1) Crusher**
Capacity: 500 tons per hour
associated with the Aggregate Processing Plant

II.A.26 **Various HMAP Material Storage Silos and Bins**
associated with the HMAP

II.A.27 **One (1) CCBP Fly-ash Silo with bin vent**
associated with the CCBP

II.A.28 **One (1) CCBP Cement Silo with bin vent**
associated with the CCBP

II.A.29 **One (1) TCBP Fly-ash Silo with bin vent**
associated with the TCBP

II.A.30 **One (1) TCBP Cement Silo with bin vent**
associated with the TCBP

II.B Requirements and Limitations

II.B.1 **The Geneva Rock Orem Plant shall be subject to the following**

II.B.1.a Geneva Rock Products shall notify the Executive Secretary in writing when the installation of the abrasive blasting operation, the paint spray booth, and the baghouse for the TCBP has been completed and is operational. To ensure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation has not been completed within 18 months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO. [R307-401-18]

II.B.1.b The Orem Plant owned by Geneva Rock Products is a State Implementation Plan (SIP) source and is listed in Section IX, Part H, Subpart 3.b. Geneva Rock Products shall abide by the requirements of the SIP for this source. [R307-110]

II.B.1.c Unless otherwise specified in this AO, visible emissions from the following emission points shall not exceed the following values:

A. All crushers - 15% opacity
B. All screens - 10% opacity
C. All conveyor transfer points - 10% opacity
D. All bin vents and baghouses - 10% opacity
E. All diesel engines - 20% opacity
F. All conveyor drop points - 20% opacity
G. All other points - 20% opacity. [R307-401]

II.B.1.c.1 Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-305]

II.B.2 **All Paved Haul Roads on site shall be subject to the following**

II.B.2.a The owner/operator shall vacuum sweep and flush with water all the paved haul roads on site to maintain opacity limits listed in this AO. If the temperature is below freezing, the owner/operator shall continue to vacuum sweep the road but may stop flushing the paved haul roads with water. If the haul roads are covered with snow or ice, the owner/operator may stop vacuum sweeping the paved haul roads and flushing the paved haul roads with water. [R307-401]

II.B.2.a.1 Records of vacuum sweeping and water application shall be kept for all periods when the plant is in operation. The records shall include the following items:

A. Date and time treatments were made
B. Number of treatments made and quantity of water applied
C. Rainfall amount received, if any
D. Records of temperature, if the temperature is below freezing
E. Records shall note if the paved haul roads are covered with snow or ice. [R307-401]

II.B.3 **All Unpaved Haul Roads on site shall be subject to the following**

II.B.3.a The owner/operator shall cover all unpaved haul roads and wheeled-vehicle operational areas with road base material and shall use water application to maintain opacity limits listed in this AO. If the temperature is below freezing, the owner/operator may stop applying water to the unpaved haul roads and wheeled-vehicle operational areas. [R307-401]

II.B.3.a.1 Records of water application shall be kept for all periods when the plant is in operation. The records shall include the following items:

A. Date and time treatments were made
B. Number of treatments made and quantity of water applied

C. Rainfall amount received, if any
D. Records of temperature, if the temperature is below freezing. [R307-401]

II.B.4 **All Haul Roads and Sources of Fugitive Dust on site shall be subject to the following**

II.B.4.a The owner/operator shall abide by a fugitive dust control plan acceptable to the Executive Secretary for control of all dust sources associated with the Geneva Rock Orem Plant. The owner/operator shall submit a fugitive dust control plan to the Executive Secretary, attention: Compliance Section, for approval within 30 days of the date of this AO. [R307-309]

II.B.4.a.1 The fugitive dust control plan shall address the following specific control strategies:

Exposed Areas

1. Maintaining moisture in exposed areas
2. Other stabilization methods in exposed areas
3. Methods to ensure exposed areas are not re-disturbed by on-site equipment or haul traffic

Storage Piles

1. Maintaining moisture in storage piles
2. Minimizing drop distance from conveyors to storage piles
3. Minimizing activities during meteorological conditions. [R307-401]

II.B.4.b The owner/operator shall not allow visible emissions from haul roads and fugitive dust sources to exceed 20 percent opacity on site and 10 percent at the property boundary. [R307-309]

II.B.4.b.1 Visible emission determinations for fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle. [R307-309]

II.B.4.c The owner/operator shall install water sprays on all storage piles on site to control fugitive emissions. Sprays shall operate as needed to ensure the opacity limits listed in this AO are not exceeded. The owner/operator may stop spraying the storage piles with water if the temperature is below freezing. [R307-401]

II.B.4.d The total acreage of the storage piles shall not exceed 10.0 acres. [R307-401]

II.B.4.e The owner/operator shall conduct its operations in such a way to minimize fugitive dust and fugitive emissions and shall abide by all applicable requirements of R307-309. [R307-309]

II.B.5 **The Hot Mix Asphalt Plant shall be subject to the following**

II.B.5.a The HMAP shall not produce more than 600,000 tons of asphalt per rolling 12-month period. [R307-401]

II.B.5.a.1 To determine compliance with a rolling 12-month total the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Production shall be determined by scale house records or vendor receipts. The records of production shall be kept on a daily basis. [R307-401]

II.B.5.b The HMAP baghouse shall control process streams from the drum mixer. This baghouse shall be sized to handle at least 2,500,000 dscf/hour for the existing conditions. All exhaust air from the HMAP drum mixer shall be routed through the baghouse before being vented to the atmosphere. [R307-401]

II.B.5.c A manometer or magnehelic pressure gauge shall be installed to measure the differential pressure across the HMAP baghouse. Static pressure differential across the baghouse shall be between 2 to 6 inches of water column. The pressure gauge shall be located such that an inspector/operator can safely read the indicator at any time. The reading shall be accurate to within plus or minus 1.0 inches water column. The instrument shall be calibrated according to the manufactures instructions at least once every 12 months. Continuous recording of the reading is not required. The owner/operator shall verify the gauge is within the indicated ranges at least once per operating day. Operation records shall indicate that the reading was checked. [R307-401]

II.B.5.d Emissions to the atmosphere from the HMAP Baghouse Exhaust Stack shall not exceed the following rates and concentrations:

Pollutant	lb/hr	grain/dscf (68 degrees F, 29.92 in Hg)
TSP	10.71	0.030
TSP (RAP)	12.49	0.035
PM_{10}	8.57	0.024
PM_{10} (RAP)	10.00	0.028. [R307-401]

II.B.5.d.1 Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

Emission Point: HMAP Baghouse Exhaust Stack

Pollutant	Testing Status	Test Frequency
TSP (virgin and RAP)	*	#
PM_{10} (virgin and RAP)	*	@

* Initial compliance testing is required for each plant. The initial test date shall be performed as soon as possible and in no case later than 180 days after the start up of a new emission source, an existing source without an AO, or the granting of an AO to an existing emission source that is modified. A compliance test is required on the modified emission point

that has an emission rate limit. Compliance testing shall not be required for both virgin and recycle materials during the same testing period. Testing shall be performed for the product being produced during the time of testing.

Initial test is required. Subsequent tests shall only be performed for PM_{10}.

@ Test every three years (non-attainment area operation) or sooner if directed by the Executive Secretary. Tests may be required if the source is suspected to be in violation with other conditions of this AO. Compliance testing shall not be required for both virgin and recycle materials during the same testing period. Testing shall be performed for the product being produced during the time of testing. [R307-401]

II.B.5.d.2 Notification:

At least 30 days prior to conducting any emission testing required under any part of UAC, R307, the owner or operator shall notify the Executive Secretary of the date, time and place of such testing and, if determined necessary by the Executive Secretary, the owner or operator shall attend a pretest conference. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary. The source test protocol shall be approved by the Executive Secretary prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary. The pretest conference shall include representation from the owner/operator, the tester, and the Executive Secretary. The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location. [R307-401]

II.B.5.d.3 TSP:

40 CFR 60, Appendix A, Method 5. [R307-401]

II.B.5.d.4 PM_{10}:

For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. The back half condensables shall also be tested using the method specified by the Executive Secretary. All particulate captured shall be considered PM_{10}.

For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensables shall also be tested using the method specified by the Executive Secretary. The portion of the front half of the catch considered PM_{10} shall be based on information in Appendix B of the fifth addition of AP-42 or other data acceptable to the Executive Secretary.

The back half condensables shall not be used for compliance demonstration but shall be used for inventory purposes. [R307-401]

II.B.5.d.5 New Source Operation:

For a new source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production rate (rated capacity) of the plant. If the maximum AO allowable production rate has not been achieved at the time of the test, the following procedure shall be followed:

1) Testing shall be at no less than 90% of the production rate achieved to date.

2) If the test is passed, the new maximum allowable production rate shall be 110% of the tested achieved rate. This new maximum allowable production rate shall be less than 90% of the allowed maximum production rate. This new allowable maximum production rate shall remain in effect until successfully tested at a higher rate.

3) The owner/operator shall request a higher production rate when necessary. Testing at no less than 90% of the higher rate shall be conducted. A new maximum production rate (110% of the new rate) will then be allowed if the test is successful. This process may be repeated until the maximum AO production rate is achieved. [R307-401]

II.B.5.d.6 Existing Source Operation:

For an existing source/emission point, the production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

In all cases, when testing for PM_{10} emissions during manufacture of recycle asphalt, recycle asphalt shall be introduced into the plant at a rate no less than 15% of the plant production (i.e. if the plant is producing 400 tons per hour of finished product, then asphalt to be recycled shall be introduced into the plant at a rate no less than 60 tons per hour.). [R307-401]

II.B.5.e The owner/operator shall use natural gas, #1 or #2, or any combination of #1 or #2 fuel oil/used-fuel oil as fuel in the HMAP. [R307-401]

II.B.5.f The owner/operator shall not burn any oil fuel or used oil fuel unless the used oil meets the following requirements:

Arsenic concentration shall not exceed 5 ppm by weight
Cadmium concentration shall not exceed 2 ppm by weight
Chromium concentration shall not exceed 10 ppm by weight
Lead concentration shall not exceed 100 ppm by weight
Total Halogens concentration shall not exceed 1,000 ppm by weight
Sulfur concentration shall not exceed 0.5 percent by weight
Flashpoint shall not exceed 100 degrees Fahrenheit. [R307-401]

II.B.5.f.1 The owner/operator shall provide test certification for each load of used oil fuel received. Certification shall be either by their own testing or test reports from the used oil fuel marketer. Records of used oil fuel consumption and the test reports shall be kept for all periods when the plant is in operation. Records shall be made available to the Executive Secretary or the Executive Secretary's representative upon request. [R307-401]

II.B.5.f.2 The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of used oil shall be either by the owner/operator's own testing or by test reports from the fuel oil or diesel fuel marketer. [R307-401]

II.B.5.f.3 Used oil that does not exceed any of the listed contaminants content may be burned. The owner/operator shall record the quantities of oil burned on a daily basis. [R307-401]

II.B.5.f.4 Any used oil fuel that contains more than 1000 ppm by weight of total halogens shall be considered a hazardous waste and shall not be burned in the HMAP. The oil shall be tested for halogen content by ASTM Method D-808-81, EPA Method 8240 or Method 8260 before used oil fuel is transferred to the HMAP fuel tank and burned. [R307-401]

II.B.5.f.5 Sources utilizing used oil as a fuel shall comply with the State Division of Solid and Hazardous Waste in accordance with R315-15, UAC. [R307-401]

II.B.5.g The owner/operator shall abide by all applicable provisions of 40 CFR 60, NSPS Subpart A (General Provisions), 40 CFR 60.1 to 60.18 and Subpart I (Standards of Performance for Hot Mix Asphalt Facilities), 40 CFR 60.90 to 60.93 for the HMAP on site. [40 CFR 60 Subpart I]

II.B.6 **The Central-Mix Concrete Batch Plant and the Truck-Mix Concrete Batch Plant shall be subject to the following**

II.B.6.a The two concrete batch plants on site shall not produce more than 325,000 cubic yards of concrete combined per rolling 12-month period with the TCBP producing no more than 45,500 cubic yards of concrete per rolling 12-month period. [R307-401]

II.B.6.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Production shall be determined by scale records or sales records. The records of production shall be kept on a daily basis. [R307-401]

II.B.6.b The silos for the CCBP and the TCBP shall be pneumatically loaded with cement or fly-ash. The displaced air from the silos, generated during filling, shall be passed through a bin vent before being vented to the atmosphere. Emissions from the weigh hopper loading and central-mix loading of the CCBP shall be controlled by the CCBP baghouse, and emissions from the weigh hopper loading and truck-mix loading of the TCBP shall be controlled by the TCBP baghouse. [R307-401]

II.B.7 **The Paint Spray Booth shall be subject to the following**

II.B.7.a The owner/operator shall conduct all the on-site paint spraying operations inside the paint spray booth. [R307-401]

II.B.7.b The owner/operator shall install a filter on the paint spray booth to control particulate emissions from overspray. [R307-401]

II.B.7.c The on-site emissions of VOCs and HAPs from the paint booth and associated operations shall not exceed:

14.45 tons per rolling 12-month period for VOCs
6.50 tons per rolling 12-month period for Xylene
1.08 tons per rolling 12-month period for Toluene
2.17 tons per rolling 12-month period for Ethyl benzene
1.44 tons per rolling 12-month period for Benzene
0.07 tons per rolling 12-month period for Naphthalene. [R307-401]

II.B.7.c.1 Compliance with each limitation shall be determined on a rolling 12-month total. Based on the last day of each month, a new 12-month total shall be calculated using data from the previous twelve months. Monthly calculations shall be made no later than 20 days after the end of each calendar month. [R307-401]

II.B.7.c.2 The VOC and HAP emissions shall be determined by maintaining a record of VOC and HAP emitting materials used each month. The record shall include the following data for each material used:

A. Name of the VOC and HAPs emitting material, such as: paint, adhesive, solvent, thinners, reducers, chemical compounds, toxics, isocyanates, etc.

B. Density of each material used (pounds per gallon)

C. Percent by weight of all VOC and HAP in each material used

D. Gallons of each VOC and HAP emitting material used

E. The amount of VOC and HAP emitted monthly by each material used shall be calculated by the following procedure:

VOC = [% VOC by Weight/100] x [Density (lb/gal)] x [Gal Consumed] x (1 ton/2,000 lb)

HAP = [% HAP by Weight/100] x [Density (lb/gal)] x [Gal Consumed] x (1 ton/2,000 lb)

F. The amount of VOC or HAP emitted monthly from all materials used.

G. The amount of VOCs or HAPs reclaimed for the month shall be similarly quantified and subtracted from the quantities calculated above to provide the monthly total VOC or HAP emissions. [R307-401]

II.B.7.d The owner/operator shall abide by all applicable provisions of MACT Standards Subpart A, 63.1 to 63.16 (General Provisions) and Subpart HHHHHH, 40 CFR 63.11169 to 63.11180 (National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources) for all on-site surface coating operations. [40 CFR 63]

II.B.8 **The Abrasive Blasting Operations and Associated Equipment on site shall be subject to the following**

II.B.8.a All abrasive blasting operations shall be conducted in the abrasive blasting enclosure. All doors in the enclosure shall be closed before blasting operations occur. The enclosure shall have no exhaust points to the atmosphere. [R307-401]

II.B.8.b The owner/operator shall abide by all applicable requirements of R307-306 (PM_{10} Nonattainment and Maintenance Areas: Abrasive Blasting) for all abrasive blasting operations conducted on site. [R307-306]

II.B.9 **The Aggregate Processing Plant and Associated Equipment shall be subject to the following**

II.B.9.a The owner/operator shall not produce more than 150,000 tons of processed aggregate material per rolling 12-month period. [R307-401]

II.B.9.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Production shall be determined by scale house records or belt scale records. The records of production shall be kept on a daily basis. [R307-401]

II.B.9.b The aggregate processing plant shall not process more than 85,000 tons of recycled concrete per rolling 12-month period. [R307-401]

II.B.9.b.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of processing shall be kept for all periods when the plant is in operation. Amount of recycled concrete processed shall be determined by belt scale records or truck scale records of concrete to be recycled. The records of processing shall be kept on a daily basis. [R307-401]

II.B.9.c The owner/operator shall install water sprays on all crushers, screens, and conveyor transfer points on site to control fugitive emissions. Sprays shall operate as needed to ensure the opacity limits listed in this AO are not exceeded. The owner/operator may stop the water sprays if the temperature is below freezing. [R307-401]

II.B.9.d Initial visible observations of opacity shall be conducted for all crushers, screens, and conveyor transfer points on site. Observations shall meet the opacity limitations listed in this AO. [40 CFR 60 Subpart OOO]

II.B.9.d.1 The owner/operator shall conduct initial observations of opacity in accordance with 40 CFR 60, Appendix A, Method 9. Initial visible emission observations shall consist of 30 observations of six minutes each in accordance with 40 CFR 60.11(b). The duration of observations may be reduced to comply with 40 CFR 60.675(c)(3) or 40 CFR 60.675(c)(4). A certified observer must be used for these observations. [40 CFR 60 Subpart OOO]

II.B.9.e The owner/operator shall abide by all applicable provisions of 40 CFR 60, NSPS Subpart A (General Provisions), 40 CFR 60.1 to 60.18 and Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants), 40 CFR 60.670 to 60.676 for all crushers, screens, and conveyors on site. [40 CFR 60 Subpart OOO]

II.B.10 **The Hot Oil Heater and the Hot Water Heaters on site shall be subject to the following**

II.B.10.a The owner/operator shall use only natural gas as a fuel in all hot water heaters and hot oil heaters on site. [R307-401]

II.B.10.b The 4.0 MMBTU/hr hot water heater for the CCBP shall not exceed 1,144 hours of operation per rolling 12-month period. [R307-401]

II.B.10.c The 2.9 MMBTU/hr hot water heater for the TCBP shall not exceed 1,144 hours of operation per rolling 12-month period. [R307-401]

II.B.10.d The 3.4 MMBTU/hr hot oil heater for the HMAP shall not exceed 6,989 hours of operation per rolling 12-month period. [R307-401]

II.B.10.e To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401]

II.B.11 **The Emergency Generator and Compressor Engines on site shall be subject to the following**

II.B.11.a All stationary diesel engines on site shall not exceed more than 238,500 total hp-hr of operation combined per rolling 12-month period. [R307-401]

II.B.11.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. To determine the total hp-hrs for the facility, the owner/operator shall multiply the horsepower of the engine and the hours operated for that engine and add the total hp-hrs of all the engines together. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log. [R307-401]

II.B.11.b The owner/operator shall use #1, #2 or a combination of #1 and #2 diesel fuel in the diesel generators. [R307-401]

II.B.11.c The sulfur content of any fuel oil or diesel burned in the generators shall not exceed 0.5 percent by weight. [R307-203]

II.B.11.c.1 The sulfur content shall be determined by ASTM Method D2880-71, D4294-89, or approved equivalent. Certification of used oil shall be either by the owner/operator's own testing or by test reports from the fuel oil or diesel fuel marketer. [R307-203]

II.B.11.d The owner/operator shall abide by all applicable provisions of 40 CFR 63, MACT Standards Subpart A (General Provisions), 63.1 to 63.16 and Subpart ZZZZ (National Emissions

Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines), 40 CFR 63.6580 to 63.6675 for all new, reconstructed, or existing (as defined in Subpart ZZZZ) stationary diesel engines on site. [40 CFR 63 Subpart ZZZZ]

II.B.11.e The owner/operator shall abide by all applicable provisions of 40 CFR 60, NSPS Subpart A (General Provisions), 40 CFR 60.1 to 60.18 and Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines), 40 CFR 60.4200 to 60.4219 for all stationary diesel engines on site as specified in 40 CFR 60.4200(a). [40 CFR 60 Subpart IIII]

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

MACT (Part 63), A: General Provisions
MACT (Part 63), HHHHHH: Strip/Misc Surf Coat Area Source
MACT (Part 63), ZZZZ: Recipro. Int. Comb Engine (RICE)
NSPS (Part 60), A: General Provisions
NSPS (Part 60), I: Hot Mix Asphalt Facilities
NSPS (Part 60), IIII: Stationary Comp/Ignit R.I.C.E
NSPS (Part 60), OOO: NonmetallicMineral ProcessingPlnts

PERMIT HISTORY

The final AO will be based on the following documents:

Is Derived From	Additional Information dated September 30, 2008
Is Derived From	Additional NOI Information dated September 24, 2008
Is Derived From	Additional NOI Information dated September 10, 2008
Is Derived From	Notice of Intent dated May 2, 2008
Supersedes	DAQE-AN0820003-05 dated March 4, 2005

ACRONYMS

The following lists commonly used acronyms and their associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
ATT	Attainment Area
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
COM	Continuous opacity monitor
DAQ	Division of Air Quality (typically interchangeable with UDAQ)
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
MACT	Maximum Achievable Control Technology
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
UAC	Utah Administrative Code
UDAQ	Utah Division of Air Quality (typically interchangeable with DAQ)
VOC	Volatile organic compounds